BACHELOR OF SCIENCE IN MINING ENGINEERING (2022-2023 Catalog Year)**

** If you need the course plan for another catalog year, please contact your MIN faculty advisor.

First Year: Fall MIN F110 – Elements of Mine Safety, Operations and Development CHEM 105X – General Chemistry WRTG 111X – Intro. to Academic Writing MATH 251X – Calculus I GER A, H, SS, E (1 of 6)	<u>Cr.</u> 2 4 3 4 <u>3</u> 16	First Year: Spring GE F261 – General Geology for Engineers MATH 252X – Calculus II CHEM 106X – General Chemistry COJO 131X/141X – Fundamentals of Communication GER A, H, SS, E (2 of 6)	<u>Cr.</u> 3 4 3 3 <u>3</u> 17
Second Year: Fall MATH 253X – Calculus III GEOS F262 – Rocks and Minerals ¹ [¹ or GEOS F213 – Mineralogy, 4 cr.] PHYS 211X – General Physics I MIN F202 – Surveying and CAD for Engineers MIN F390 – Geostatistics & Mineral Economics (O)	4 3 4 2 <u>3</u> 16	Second Year: Spring GER A, H, SS, E (3 of 6) ES 208 – Mechanics PHYS 212X – General Physics II GEOS F332 – Ore Deposits/Structure ² [² or GEOS F214 – Petrology & Petrography, 4 cr.] WRTG 211X/213X – Academic Writing	3 4 4 3 <u>3</u> 17
Third Year: Fall ES 307 – Elements of Electrical Engineering ES 331 – Mechanics of Materials ES 341 – Fluid Mechanics MIN F407 – Mine Reclamation and Environmental Management (W) MIN F482 – Computer Aided Mine Planning and Design	3 3 4 2 <u>3</u> 15	Third Year: Spring ES 346 – Basic Thermodynamics MATH 302 – Differential Equations MIN F302 – Underground Mine Environmental Engineering MIN F303 – Ore handling and Industrial explosives MIN F370 – Rock Mechanics MIN F484 – Surface Mining Methods	3 3 3 3 3 1 16
Fourth Year: Fall LS 101X – Library Info & Research GER A, H, SS, E (4 of 6) GER A, H, SS, E (5 of 6) MIN F313 – Introduction to Mineral Preparation MIN F454 – Underground Mining Methods MIN F489 – Mining Design Project I	1 3 3 2 <u>1</u> 13	Fourth Year: Spring GER A, H, SS, E (6 of 6) Technical Elective MIN F409 – Operations Research MIN F444 – Accident, Emergency and Safety Management in Mines MIN F485 – Mining Exit Exam MIN F490 – Mining Design Project II (W) MIN F491 – Automation and Control	3 2 2 0 2 2 14

NOTES:

* GER A. H. SS. E: General Education Requirements – Arts, Humanities, Social Science, Ethics

* Geosciences requirements: (1) GEOS 262 or GEOS 213; (2) GEOS 332 or GEOS 214

* Technical electives are selected in consultation with your Mining Engineering faculty advisor.

* Students must take the Fundamentals of Engineering Exam in order to graduate.

* Mining Engineering B.S. degree requires completion of a minimum of 124 credits.

Modified 11/05/2021